

ABSTRACT

A refrigeration system including a two-stage type compressor having independent low-pressure and high-pressure compressing portions, a heat-releasing device having independent primary and secondary heat-releasing paths, an expansion valve and a cooler. The refrigerant primarily compressed by the low-pressure compressing portion is primarily released in heat by the primary heat-releasing path. The primarily heat-released refrigerant is secondarily compressed by the high-pressure compressing portion. The secondarily compressed refrigerant is secondarily released in heat by the secondary heat-releasing path to thereby obtain a low-temperature and high-pressure refrigerant. The low-temperature and high-pressure refrigerant is decompressed and expanded by an expansion valve and passes through the cooler to absorb the heat in a room air, and then returns to the low-pressure compressing portion of the compressor. In this system, the refrigerant temperature during the heat-releasing procedure can be kept low.